



PTO/SB/08a/b (08-03)
Approved for use through 07/31/2008. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete If Known	
				Application Number	10/616,082
				Filing Date	July 8, 2003
				First Named Inventor	Stephen Hamilton
				Art Unit	1636
				Examiner Name	Not yet assigned
Sheet	1	of	12	Attorney Docket Number	GFI/107 CIP

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
MKJ	AA	4,414,329	11-08-1983	Wegner	
	AB	4,617,274	10-14-1986	Wegner	
	AC	4,683,293	07-28-1987	Craig	
	AD	4,775,622	10-04-1988	Hitzeman et al.	
	AE	4,808,537	02-28-1989	Stroman et al.	
	AF	4,812,405	03-14-1989	Lair et al.	
	AG	4,818,700	04-04-1989	Cregg et al.	
	AH	4,837,148	06-06-1989	Cregg	
	AI	4,855,231	08-08-1989	Stroman et al.	
	AJ	4,857,467	08-15-1989	Sreekrishna et al.	
	AK	4,879,231	11-07-1989	Stroman et al.	
	AL	4,882,279	11-21-1989	Cregg	
	AM	4,885,242	12-05-1989	Cregg	
	AN	4,925,796	05-15-1990	Bergh et al.	
	AO	4,929,555	05-29-1990	Cregg et al.	
	AP	4,935,349	06-19-1990	McKnight et al.	
	AQ	5,002,876	03-26-1991	Sreekrishna et al.	
	AR	5,004,688	04-02-1991	Craig et al.	
	AS	5,032,516	07-16-1991	Cregg	
	AT	5,032,519	07-16-1991	Paulson et al.	
	AU	5,047,335	09-10-1991	Paulson et al.	
	AV	5,122,465	06-16-1992	Cregg et al.	
	AW	5,135,854	08-04-1992	MacKay et al.	
	AX	5,166,329	11-24-1992	Cregg	
	AY	5,324,663	06-28-1994	Lowe	
	AZ	5,595,900	01-21-1997	Lowe	
	AA1	5,602,003	02-11-1997	Pierse et al.	
	AB1	5,707,828	01-13-1998	Sreekrishna et al.	
	AC1	5,766,910	06-16-1998	Fukuda et al.	
	AD1	5,834,251	11-10-1998	Maras et al.	
	AE1	5,849,904	12-15-1998	Gerardy-Schahn et al.	
	AF1	5,854,018	12-29-1998	Hitzemane et al.	
	AG1	5,861,293	01-19-1999	Kojiri et al.	
	AH1	5,910,570	06-08-1999	Elhammer et al.	
	AI1	5,945,314	08-31-1999	Prieto et al.	
	AJ1	5,945,322	08-31-1999	Gotschlich	
	AK1	5,955,347	09-21-1999	Lowe	
	AL1	5,955,422	09-21-1999	Lin	
	AM1	5,962,294	10-05-1999	Paulson et al.	
	AN1	6,017,743	01-25-2000	Tsuji et al.	
	AO1	6,096,512	08-01-2000	Elhammer et al.	
	AP1	6,204,431	03-20-2001	Prieto et al.	

Examiner Signature	Digitally signed by Michele Joike DN: cn=Michele Joike, c=US, o=USPTO, ou=1636, email=Michele.Joike@uspto.gov Date: 2006.05.08 13:23:16 -0400	Date Considered	5/8/06
-----------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------	--------

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete If Known	
				Application Number	10/616,082
				Filing Date	July 8, 2003
				First Named Inventor	Stephen Hamilton
				Art Unit	1636
				Examiner Name	Not yet assigned
				Attorney Docket Number	GFI/107 CIP
Sheet	2	of	12		

MKJ	AQ1	6,300,113	10-09-2001	Landry	
-----	-----	-----------	------------	--------	--

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁴
		Country Code ² -Number ³ -Kind Code ⁵ (if known)				
MKJ	BA**	EP 0 905 232 A1	03-31-1999	Kirin Beer Kabushiki Kaisha		
	BB**	EP 1 054 062 A1	11-22-2000	Kyowa Hakko Kogyo Co., Ltd.		
	BC**	EP 1 211 310 A	06-05-2002	Kainuma Mam		
	BD**	WO 96/21038 A	07-11-1996	Maras Marleen, et al		
	BE**	WO 98/05768	02-12-1998	The Austin Research Institute		
	BF**	WO 99/31224	06-24-1999	National Research Council of Canada		
	BG**	WO 99/54342	10-28-1999	Umana et al.		
	BH**	WO 01/14522 A1	03-01-2001	Kirin Brewery et al.		
	BI**	WO 01/25406	04-12-2001	University of Victoria Innovation & Development Corp.		
	BJ**	WO 02/00856	01-01-2002	Flanders Interuniversity Institute for Biotechnology		
	BK**	WO 02/00879	01-03-02	Glycofi Inc.		
	BL**	WO 03/031464 A	4-17-2003	Chen XI, et al		
	BM**	WO 04/003194 A	01-08-2004	Flanders Interuniversity Inst		
	BN**	JP 8-336387	12-24-1996	Murakami Koji et al.		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 801.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
MKJ	CA**	Abeijon et al., "Molecular Cloning of the Golgi apparatus uridine diphosphate-N-acetylglucosamine transporter from <i>Kluyveromyces lactis</i> ," <i>Proc. Natl. Acad. Sci. USA</i> 93:5963-5968 (1996).	
MKJ	CB**	Adachi et al., "Mus Musculus Adult Male Testis cDNA, Riken full length enriched library, clone: 4931438M07 product: mannosidase 2, alpha 2, full insert sequence" XP002293645, Database accession no. AK029913 Abstract, Database EMBL, December 21, 2002	

Examiner Signature	<i>Michelle K. Gabe</i>	Date Considered	5/8/06
--------------------	-------------------------	-----------------	--------

Substitute for form 1449A/B/PTO			Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Application Number	10/616,082
			Filing Date	July 8, 2003
			First Named Inventor	Stephen Hamilton
			Art Unit	1636
			Examiner Name	Not yet assigned
			Attorney Docket Number	GFI/107 CIP
Sheet	3	of	12	

MKJ	CC**	Alani et al., "A Method for Gene Disruption that Allows Repeated Use of URA3 Selection in the Construction of Multiply Disrupted Yeast Strains," <i>Genetics</i> 116, 541-545, August, 1987.	
	CD**	Altman et al., "Processing of Asparagine-linked Oligosaccharides in Insect Cells: Evidence for Alpha-Mannosidase II," <i>Glycoconj. J</i> 12(2):150-155 (1995).	
	CE**	Altman et al., "Insect cells as hosts for the expression of recombinant glycoproteins," <i>Glycoconj. J.</i> 16(2):109-123 (1999).	
	CF**	Andersen et al., "The Effect of Cell-Culture Conditions on the Oligosaccharide Structures of Secreted Glycoproteins," <i>Curr Opin Biotechnol</i> , 5(5):546-549, October 1994.	
	CG**	Aoki et al., "Expression and activity of chimeric molecules between human UDP-galactose transporter and CMP-sialic acid transporter," <i>J. Biochem. (Tokyo)</i> , 126(5):940-50, November, 1999.	
	CH**	Bardor et al., "Analysis of the N-glycosylation of recombinant glycoproteins produced in transgenic plants," <i>Trends in Plant Science</i> 4(9): 376-380 (1999)	
	CI**	Beaudet et al., "High-level expression of mouse Mdr3 P-glycoprotein in yeast <i>Pichia pastoris</i> and characterization of ATPase activity," <i>Methods Enzymol</i> 292: 397-413 (1998)	
	CJ**	Berka et al., "The Filamentous Fungus <i>Aspergillus-Niger</i> Var <i>Awamori</i> as Host for the Expression and Secretion of Fungal and Non-Fungal Heterologous Proteins," <i>Abstr Papers Amer Chem Soc</i> 203: 121-BIOT (1992)	
	CK**	Berninsone et al., "The Golgi Guanosine Diphosphatase is Required For Transport of GDP-Mannose Into the Lumen of <i>Saccharomyces cerevisiae</i> Golgi Vesicles," <i>J. Biol. Chem.</i> , 269(1):207-211, January, 1994.	
	CL**	Berninsone et al., "Regulation of yeast Golgi glycosylation. Guanosine diphosphatase functions as a homodimer in the membrane," <i>J. Biol. Chem</i> 270(24): 14564-14567 (1995).	
	CM**	Berninsone et al., "Functional Expression of the Murine Golgi CMP-Sialic Acid Transporter in <i>Saccharomyces cerevisiae</i> ," <i>J. Biol. Chem.</i> 272(19):12616-12619, May, 1997.	
	CN**	Bianchi et al., "Transformation of the yeast <i>Kluyveromyces lactis</i> by new vectors derived from the 1.6 μ m circular plasmid pKD1," <i>Current Genetics</i> , 12:185-192, 1987.	
↓	CO**	Boehm et al., "Disruption of the KEX1 Gene in <i>Pichia Pastoris</i> Allows Expression of Full-Length Murine and Human Endostatin," <i>Yeast</i> , 15:563-572 (1999).	

Examiner Signature	<i>Michele K. Goble</i>	Date Considered	5/8/06
--------------------	-------------------------	-----------------	--------

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Application Number	10/616,082	
			Filing Date	July 8, 2003	
			First Named Inventor	Stephen Hamilton	
			Art Unit	1636	
			Examiner Name	Not yet assigned	
Sheet	4	of	12	Attorney Docket Number	GFI/107 CIP

MKJ	CP**	Bonneaud et al., "A family of low and high copy replicative, integrative and single-stranded S. cerevisiae/E. coli shuttle vectors," <i>Yeast</i> 7(6): 609-615 (1991).	
	CQ**	Bretthauer et al., "Glycosylation of Pichia pastoris-derived proteins," <i>Biotechnol Appl Biochem</i> 30(Pt 3): 193-200 (1999).	
	CR**	Bretthauer et al., "Genetic engineering of Pichia pastoris to humanize N-glycosylation of proteins," <i>TRENDS in Biochem</i> , 21(11): 459-462 (2003).	
	CS**	Brockhausen et al., "Control of glycoprotein synthesis. The use of oligosaccharide substrates and HPLC to study the sequential pathway for N-acetylglucosaminyltransferases I, II, III, IV, V and VI in the biosynthesis of highly branched N-glycans by hen oviduct membranes," <i>Biochem. Cell Biol.</i> 66:1134-1151 (1988).	
	CT**	Callewaert et al., "Use of HDEL-Tagged <i>Trichoderma reesei</i> Mannosyl Oligosaccharide 1,2V-D-Mannosidase for N-glycan Engineering in <i>Pichia pastoris</i> ," <i>FEBS Letters</i> , 503(2-3):173-8, 2001.	
	CU**	Cereghino et al., "Heterologous protein expression in the methylotrophic yeast <i>Pichia pastoris</i> ," <i>FEMS Microbiology Reviews</i> , 24(1): 45-66 (2000).	
	CV**	Cereghino et al., "New selectable marker/auxotrophic host strain combinations for molecular genetic manipulation of <i>Pichia pastoris</i> ," <i>Gene</i> , 263:159-169 (2001).	
	CW**	Chandrasekaran et al., "Purification and Properties of Alpha-D-Mannose:beta-1,2-N-acetylglucosaminyl-transferases and alpha-D-Mannosidases from Human Adenocarcinoma," <i>Cancer Res.</i> , 44(9):4059-68, September, 1984.	
	CX**	Chiba et al., "Production of Human Compatible High Mannose-type (Man ₅ GlcNAc ₂) Sugar Chains in <i>Saccharomyces cerevisiae</i> ," <i>J. Biol. Chem.</i> , 273(41):26298-26304, October, 1998.	
	CY**	Choi et al., "Use of combinatrol genetic libraries to humanize N-linked glycosylation in the yeast <i>Pichia pastoris</i> ," <i>Proc. Natl. Acad. Sci. USA</i> 100(9):5022-5027, April, 2003.	
	CZ**	Chui et al., "Genetic Remodeling of Protein Glycosylation <i>in vivo</i> Induces Autoimmune Disease," <i>Proc. Natl. Acad. Sci.</i> , USA 98:1142-1147, January, 2001.	
	CA1**	Chui et al., "Alpha-mannosidase-II Deficiency Results in Dyserythropoiesis and Unveils and Alternate Pathway in Oligosaccharide Biosynthesis," <i>Cell</i> , 1997 July 11; 90(1):157-67.	
✓	CB1**	Daniel et al., "Mammalian Alpha-Mannosidases—Multiple Forms but a Common Purpose?," <i>Glycobiology</i> , 4, 551-566, October 1994.	

Examiner Signature	<i>Michelle K. Goble</i>	Date Considered	5/8/06
--------------------	--------------------------	-----------------	--------

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete If Known	
				Application Number	10/616,082
				Filing Date	July 8, 2003
				First Named Inventor	Stephen Hamilton
				Art Unit	1636
				Examiner Name	Not yet assigned
Sheet	5	of	12	Attorney Docket Number	GFI/107 CIP

MKJ	CC1**	Davidson et al., "A PCR-Based Strategy to Generate Integrative Targeting Alleles With Large Regions of Homology," <i>Microbiology</i> , 148 (Pt 8):2607-15).	
	CD1**	Dente, "Human alpha-1-acid glycoprotein genes," <i>Prog. Clin. Biol. Res</i> 300:85-98 (1989).	
	CE1**	Duvet et al., "Cytosolic Deglycosylation Process of Newly Synthesized Glycoproteins Generates Oligomannosides Possessing One GlcNAc Residue at the Reducing End," <i>Biochem J.</i> , 335, 1998, 389-396.	
	CF1**	Eades et al., "Characterization of the Class I alpha-Mannosidase Gene Family in the Filamentous Fungus <i>Aspergillus Nidulans</i> ," <i>Gene</i> , 2000, Sept 5; 255(1):25-34.	
	CG1**	Eckhardt et al., "Molecular Cloning of the Hamster CMP-Sialic Acid Transporter," <i>Eur. J. Biochem.</i> , 248(1):187-192 (1997).	
	CH1**	Foster et al., "Cloning and Sequence Analysis of Gm11, a <i>Drosophila Melanogaster</i> Homologue of the cDNA Encoding Murine Golgi alpha-Mannosidase II," <i>Gene</i> 154 (1995) 183-186.	
	CI1**	Gleeson, Paul A. "Targeting of Proteins to the Golgi Apparatus," <i>Histochem. Cell Biol.</i> , 109:517-532 (1998).	
	CJ1**	Gonzalez, Daniel S et al: "The Alpha-Mannosidases: Phylogeny and Adaptive Diversification" <i>Molecular Biology and Evolution</i> , vol.17, no.2, February 2000, pages 292-300, XP002293609 ISSN: 0737-4038	
	CK1**	Graham et al., "Compartmental Organization of Golgi-specific Protein Modification and Vacuolar Protein Sorting Events Defined in Yeast sec18 (<i>NSF</i>) Mutant," <i>J. Cell. Biol.</i> , 114(2): 207-218 (1991).	
	CL1**	Grard et al., "Oligomannosides or Oligosaccharide-lipids as Potential Substrates for Rat Liver Cytosolic V-D-Mannosidase," <i>Biochem. J.</i> , 316: 787-792 (1996)	
	CM1**	Guillen et al., "Mammalian Golgi apparatus UDP-N-acetylglucosamine transporter: Molecular Cloning by Phenotypic Correction of a Yeast Mutant," <i>Proc. Natl. Acad. Sci. USA</i> , 95(14):7888-7892 (1998).	
	CN1**	Hamilton et al., "Production of Complex Human Glycoproteins in Yeast," <i>Science</i> 301:1244-1246 (2003).	
	CO1**	Harkki et al., "A Novel Fungal Express System - Secretion of Active Calf Chymosin from the Filamentous Fungus <i>Trichoderma-Reesei</i> ," <i>Bio-Tech</i> 7:596-603 (1989).	
V	CP1**	Harris B.R.: "Caenorhabditis Elegans Cosmid F58H1" XP002293610, Protein F58H1.1, Abstract, Database EMBL 13 July 1996	

Examiner Signature		Date Considered	5/8/06
--------------------	-------------------------------------------------------------------------------------	-----------------	--------

Substitute for form 1449A/B/PTO			Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Application Number	10/616,082
			Filing Date	July 8, 2003
			First Named Inventor	Stephen Hamilton
			Art Unit	1636
			Examiner Name	Not yet assigned
			Attorney Docket Number	GFI/107 CIP
Sheet	6	of	12	

MKJ	CQ1**	Ichishima et al., "Molecular and Enzymic Properties of Recombinant 1,2- α -Mannosidase from <i>Aspergillus saitoi</i> Overexpressed in <i>Aspergillus oryzae</i> Cells," 1999; <i>Biochem. J.</i> , 339(Pt 3): 589-597.	
	CR1**	Ishida et al., "Molecular Cloning and Functional Expression of the Human Golgi UDP-N-Acetylglucosamine Transporter," <i>J. Biochem.</i> , 126(1):68-77 (1999).	
	CS1**	Jarvis et al., "Isolation and Characterization of a Class II alpha-mannosidase cDNA from Lepidopteran Insect Cells," <i>Glycobiology</i> , 1997; 7(1):113-127 (1997).	
	CT1**	Jarvis et al., "Engineering N-glycosylation pathways in the baculovirus-insect cell system," <i>Curr Opin Biotechnol</i> 9(5): 528-33 (1998).	
	CU1**	Kainuma et al., "Coexpression of α 1,2 galactosyltransferase and UDP-galactose transporter efficiently galatoseylates N- and O-glycan in <i>Saccharomyces cerevisiae</i> ," <i>Glycobiology</i> , 9(2): 133-141 (1999).	
	CV1**	Kalsner et al., "Insertion into <i>Aspergillus nidulans</i> of functional UDP-GlcNAc: α 3-D-mannoside β -1,2-N-acetylglucosaminyl-transferase I, the enzyme catalysing the first committed step from oligomannose to hybrid and complex N-glycans," <i>Glycoconj. J.</i> , 12(3):360-370 (1995).	
	CW1**	Kawar et al., "Insect Cells Encode a Class II α -Mannosidase with Unique Properties," <i>J. Biol. Chem.</i> , 276(19):16335-16340 (2001).	
	CX1**	Khatra et al., "Some kinetic properties of human milk galactosyltransferase," <i>Eur. J. Biochem.</i> 44:537-560 (1974).	
	CY1**	Krekdorn et al., "Human β 1,4 galactosyltransferase and α 2,6 sialyltransferase expressed in <i>Saccharomyces cerevisiae</i> are retained as active enzymes in the endoplasmic reticulum," <i>Eur. J. Biochem.</i> , 220(3): 809-17 (1994).	
	CZ1**	Lal et al., "Isolation and Expression of Murine and Rabbit cDNAs Encoding an α 1,2-Mannosidase Involved in the Processing of Asparagine-Linked Oligosaccharides," <i>J. Biol. Chem.</i> , 1994. 269(13): 9872-9881.	
	CA2**	Lal et al. "Substrate Specificities of Recombinant Murine Golgi α 1,2-Mannosidase IA and IB and Comparison with Endoplasmic Reticulum and Golgi Processing α 1,2-Mannosidases," <i>Glycobiology</i> 8(10):981-995, 1998.	
	CB2**	Liao et al., "Cloning, Expression, Purification, and Characterization of the Human Broad Specificity Lysosomal Acid α -Mannosidase," <i>J Biol Chem</i> 271(45): 28348-28358.	
↓	CC2**	Lehle and Tanner, "Membrane-Bound Mannosyl Transferase in Yeast Glycoprotein Biosynthesis," <i>Biochem. Biophys. Acta</i> , 350(1): 225-235, 1974.	

Examiner Signature	<i>Michelle K. Gable</i>	Date Considered	5/8/06
--------------------	--------------------------	-----------------	--------

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/616,082
				Filing Date	July 8, 2003
				First Named Inventor	Stephen Hamilton
				Art Unit	1636
				Examiner Name	Not yet assigned
Sheet	7	of	12	Attorney Docket Number	GFI/107 CIP

MKJ	CD2**	Lu et al., "Cloning and Disruption of the b-Isopropylmalate Dehydrogenase Gene of <i>Pichia Stipitis</i> with URA3 and Recovery of the Double Auxotroph," <i>Appl. Microbiol. Biotechnol.</i> , 49 (2): 141-146 (1998).	
	CE2**	Lussier et al., "The <i>KTR</i> and <i>MNNI</i> mannosyltransferase families of <i>Saccharomyces cerevisiae</i> ," <i>Biochimica et Biophysica Acta</i> 1426: 323-334 (1999).	
	CF2**	Malissard et al., "Expression of functional soluble forms of human beta-1, 4-galactosyltransferase I, alpha-2-6-sialyltransferase, and alpha-1, 3-fucosyltransferase VI in the methylotrophic yeast <i>Pichia pastoris</i> ," <i>Biochem Biophys Res Commun</i> 267(1): 169-173 (2000).	
	CG2**	Maras et al., "In vitro conversion of the carbohydrate moiety of fungal glycoproteins to mammalian-type oligosaccharides," <i>Eur. J. Biochem.</i> , 249: 701-707 (1997).	
	CH2**	Maras et al., "Filamentous fungi as production organisms for glycoproteins of bio-medical interest," <i>Glycoconjugate Journal</i> , 16:99-107 (1999)	
	CI2**	Maras et al., "Molecular Cloning and Enzymatic Characterization of a <i>Trichoderma reesei</i> 1,2-alpha-D-mannosidase," <i>J. Biotechnol.</i> , 77(2-3):255-263, 2000.	
	CJ2**	Martinet et al., "Modification of the protein glycosylation pathway in the methylotrophic yeast <i>Pichia pastoris</i> ," <i>Biotechnology Letters</i> 20(12): 1171-1177 (1998).	
	CK2**	Maruyama et al., "A 1,2-alpha-D-Mannosidase from a <i>Bacillus</i> sp.: Purification, Characterization, and Mode of Action," <i>Carbohydrate Res.</i> 251:89-98 (1994).	
	CL2**	McClure "Modeling the growth, survival and death of microorganisms in foods: the UK food micromodel approach," <i>Int. J. Food Microbiol.</i> , 23(3-4) 265-265 (1994).	
	CM2**	McGarvey et al., "Expression of the rabies virus glycoprotein in transgenic tomatoes," <i>Bio-Technology</i> 13(13): 1484-1487 (1995).	
	CN2**	Merkle et al., "Cloning, Expression, Purification, and Characterization of the Murine Lysosomal Acid Alpha-Mannosidase," <i>Biochim Biophys Acta</i> , 1336(2): 132-46 (1997).	
	CO2**	Miele et al., "Glycosylation Properties of the <i>Pichia pastoris</i> -Expressed Recombinant Kringle 2 Domain of Tissue-Type Plasminogen Activator," <i>Biotechnol. Appl. Biochem.</i> , 25:151-157 (1997).	
✓	CP2	Moens et al., "Glycoproteins in prokaryotes," <i>Arch. Microbiol.</i> 168(3):169-175	

Examiner Signature	<i>Michele K. Gable</i>	Date Considered	5/8/06
--------------------	-------------------------	-----------------	--------

Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Complete If Known	
				Application Number	10/616,082
				Filing Date	July 8, 2003
				First Named Inventor	Stephen Hamilton
				Art Unit	1636
				Examiner Name	Not yet assigned
Sheet	8	of	12	Attorney Docket Number	GFI/107 CIP

MKJ	CQ2**	Moremen, "Golgi α -mannosidase II deficiency in vertebrate systems: implications for asparagine-linked oligosaccharide processing in mammals," <i>Biochimica Biophysica Acta</i> , 1573: 225-235 (2002).	
	CR2**	Moremen et al., "Biosynthesis and Modification of Golgi Mannosidase II in HeLa and 3T3 Cells," <i>J. Biol. Chem.</i> , 260(11): 6654-6662 (1985).	
	CS2**	Moremen et al., "Topology of Mannosidase II in Rat Liver Golgi Membranes and Release of the Catalytic Domain by Selective Proteolysis," <i>J. Biol. Chem.</i> , 261(23): 10945-10951 (1986).	
	CT2**	Moremen, "Isolation of a Rat Liver Golgi Mannosidase II Clone by Mixed Oligonucleotide-Primed Amplification of cDNA," <i>Proc. Natl. Acad. Sci., USA</i> 1989 July;86(14):5276-80.	
	CU2**	Moremen et al., "Isolation, Characterization, and Expression of cDNAs Encoding Murine \forall -Mannosidase II, a Golgi Enzyme that Controls Conversion of High Mannose to Complex N-Glycans," <i>Journal of Cell Biology</i> , 1991 December; 115(6):1521-34.	
	CV2**	Moremen et al., "Glycosidases of the Asparagine-Linked Oligosaccharide Processing Pathway," <i>Glycobiology</i> 4(2): 113-125 (1994).	
	CW2**	Nakanishi-Shindo et al., "Structure of the N-Linked Oligosaccharides That Show the Complete Loss of α -1,6-Polymannose Outer Chain from <i>och1</i> , <i>och1 mnn1</i> , and <i>och1 mnn1 alg3</i> Mutants in <i>Saccharomyces cerevisiae</i> ," <i>J. Biol. Chem.</i> , 268(35):26338-45 (1993).	
	CX2**	Nakayama et al., "OCHI1 Encodes a Novel Membrane Bound Mannosyltransferase: Outer Chain Elongation of Asparagine-Linked Oligosaccharides," <i>Embo J.</i> , 11(7):2511-19, 1992.	
	CY2**	Nakayama et al. "Substrate Specificity of \forall -1,6-Mannosyltransferase that Initiates N-Linked Mannose Outer Chain Elongation in <i>Saccharomyces cerevisiae</i> ," <i>FEBS Lett.</i> , 412(3):547-50, 1997.	
	CZ2**	Nikawa et al., "Structural and functional conservation of human and yeast HCP1 genes which can suppress the growth defect of the <i>Saccharomyces cerevisiae ire15</i> mutant," <i>Gene</i> 171(1): 107-111 (1996)	
	CA3**	Ogawa et al., "Structure and Transcriptional Regulation of Human α -Mannosidase IIX (α -mannosidase II isotype) Gene," <i>Eur. J. Biochem.</i> , 242(3): 446-453 (1996).	
↓	CB3**	Oh-eda et al., "Overexpression of the Golgi-Localized Enzyme \forall -mannosidase IIX in Chinese Hamster ovary Cells Results in the Conversion of Hexamannosyl-N-acetylchitobiose to Tetramannosyl-N-acetylchitobiose in the N-glycan-processing Pathway," <i>Eur. J. Biochem.</i> , 268: 1280-1288 (2001).	

Examiner Signature	Michelle K. Galtie	Date Considered	5/8/05
--------------------	--------------------	-----------------	--------

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/616,082
				Filing Date	July 8, 2003
				First Named Inventor	Stephen Hamilton
				Art Unit	1636
				Examiner Name	Not yet assigned
Sheet	9	of	12	Attorney Docket Number	GFI/107 CIP

MKJ	CC3**	Papac et al., "A high-throughput microscale method to release N-linked oligosaccharides from glycoproteins for matrix-assisted laser desorption/ionization time-of-flight mass spectrometric analysis," <i>Glycobiology</i> 8(5): 445-454 (1998).	
	CD3**	Perez et al., "Transport of Sugar Nucleotides into the Lumen of Vesicles Derived from Rat Liver Rough Endoplasmic Reticulum and Golgi Apparatus," <i>Methods in Enzymology</i> , 138: 709-715 (1987).	
	CE3**	Puglielli et al., "Reconstitution, Identification, and Purification of the Rat Liver Golgi Membrane GDP-fucose Transporter," <i>J. Biol. Chem.</i> 274(50): 35596-35600 (1999).	
	CF3**	Rabouille et al., "The <i>Drosophila</i> GMII Gene Encodes Golgi α -mannosidase II," <i>J. Cell Sci.</i> , 1999 October;112(Pt 19): 3319-30.	
	CG3**	Raju et al., "Analysis of glycoconjugates," <i>Anal Biochem.</i> 283(2): 123-124 (2000).	
	CH3**	Ren et al., "Purification and Properties of a Golgi-Derived (α 1,2)-mannosidase-I from Baculovirus-infected Lepidopteran Insect Cells (IPLB-SF21AE) with Preferential Activity Toward Mannose6-N-Acetylglucosamine2," <i>Biochem.</i> , 34(8): 2489-2495.	
	CI3**	Roberts, D.B.: "Drosophila Melanogaster GMII gene, exons 1-5" XP002293614, Database accession no. AJ132715, Abstract, Database EMBL	
	CJ3**	Romero et al., "Ktr1P is an α -1,2-mannosyltransferase of <i>Saccharomyces cerevisiae</i> ," <i>Biochem. J.</i> , 321 (Pt 2): 289-295 (1997).	
	CK3**	Romero et al., "Mutation of Arg ²⁷³ to Leu Alters the Specificity of the Yeast N-Glycan Processing Class I α 1,2-Mannosidase," <i>J. Biol. Chem.</i> , 275(15):11071-11074 (2000).	
	CL3**	Ruther et al., "c-fos expression interferes with thymus development in transgenic mice," <i>Cell</i> 53(6): 847-856 (1988).	
	CM3**	Schachter et al., "The 'Yellow Brick Road' to Branched Complex N-glycans," <i>Glycobiology</i> 1(5): 453-461, 1991.	
	CN3**	Sato et al., "Arabidopsis Thaliana DNA Chromosome 5, BAC clone F2G14 (Essa project)", XP002293613, Database accession no AL391146, gene "F2G14_70" encoding "alpha-mannosidase-like protein" of protein_id="CAC01814.1" Abstract, Database EMBL 7 August 2000	
	CO3**	Satou and SatoH: "Ciona Intestinalis cDNA, clone: cieg014e11, full insert sequence." XP002293611, Database accession no. AK116684, the whole document, Database EMBL	
▼	CP3**	Schneikert et al., "Characterization of a Novem Mouse Recombinant Processing alpha-mannosidase," <i>Glycobiology</i> , 4(4):445-450 (1994).	

Examiner Signature	<i>michele v. garcia</i>	Date Considered	5/8/06
--------------------	--------------------------	-----------------	--------

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/616,082
				Filing Date	July 8, 2003
				First Named Inventor	Stephen Hamilton
				Art Unit	1636
				Examiner Name	Not yet assigned
Sheet	10	of	12	Attorney Docket Number	GFI/107 CIP

MKJ	CQ3**	Schwientek et al., "Golgi Localization in Yeast is Mediated by the Membrane Anchor Region in Rat Liver Sialyltransferase," <i>J. Biol. Chem.</i> , 270(10):5483-5489 (1995).	
	CR3**	Segawa et al., "Schizosaccharomyces pombe UDP-galactose transporter: identification of its functional form through cDNA cloning and expression in mammalian cells," <i>FEBS Letters</i> , 451(3): 295-298 (1999).	
	CS3**	Shinn et al: "Arabidopsis Thaliana AT5g14950/F2G14_70 mRNA, complete cds." XP002293612, Database accession no. AY052707, Abstract, Database EMBL	
	CT3**	Sikorski et al., "A system of shuttle vectors and yeast host strains designed for efficient manipulation of DNA in <i>Saccharomyces cerevisiae</i> ," <i>Genetics</i> 122(1): 19-27 (1989).	
	CU3**	Soderholm et al. "Vector for pop-in/pop-out Gene Replacement in <i>Pichia pastoris</i> ," <i>Biotchniques</i> , 31 (2):306-10 (2001).	
	CV3**	Sommers et al., "Transport of Sugar Nucleotides into Rat Liver Golgi," <i>J. Cell Biol.</i> , 91(2): A406-A406 (1981).	
	CW3**	Sommers et al., "Transport of Sugar Nucleotides into Rat Liver Golgi. A New Golgi Marker Activity," <i>J Biolog Chem</i> , 257(18): 10811-10817 (1982).	
	CX3**	Staub et al., "High-yield production of a human therapeutic protein in tobacco chloroplasts," <i>Nature Biotechnology</i> 18(3): 333-338 (2000).	
	CY3**	Stix, "Supercharging Protein Manufacture," <i>Scientific Amer.</i> , Jan. 2004: 32-33.	
	CZ1**	Svetina et al., "Expression of Catalytic Subunit of Bovine Enterokinase in the Filamentous Fungus <i>Aspergillus Niger</i> ," <i>J. Biotechnol.</i> , 76(2-3): 245-251 (200).	
	CA4**	Swiss Prot P11655.	
	CB4**	Swiss Prot P32906	
	CC4**	Swiss Prot P39107	
	CD4**	Swiss Prot P50108	
	CE4**	Swiss Prot P53008	
	CF4**	Takeuchi, "Trial for molecular breeding of yeast for the production of glycoprotein therapeutics," <i>Trends in Glycoscience and Glycotechnology</i> 9:S29-S35 (1997).	
	CG4**	Umaña et al., "Engineered Glycoforms of an Antineuroblastoma IgG1 with Optimized Antibody-Dependent Cellular Cytotoxic Activity," <i>Nature Biotechnology</i> , 17(1):176-80 (1999).	
✓	CH4**	Ware et al., "Expression of Human Platelet Glycoprotein Ib-Alpha in Transgenic Mice," <i>Thrombosis and Haemostasis</i> 69(6): 1194-1194 (1993).	

Examiner Signature	<i>Michelle K. Gail</i>	Date Considered	5/8/06
--------------------	-------------------------	-----------------	--------

Substitute for form 1449A/B/PTO			Complete if Known		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)			Application Number	10/616,082	
			Filing Date	July 8, 2003	
			First Named Inventor	Stephen Hamilton	
			Art Unit	1636	
			Examiner Name	Not yet assigned	
			Attorney Docket Number	GFI/107 CIP	
Sheet	11	of	12		

MKJ	CI4**	Weikert et al., "Engineering Chinese Hamster Ovary Cells to Maximize Sialic Acid Content of Recombinant Glycoproteins", <i>Nature Biotechnology</i> , 17(11): 1116-1121, November, 1999.	
	CJ4**	Werner et al., "Appropriate Mammalian Expression Systems for Biopharmaceuticals," <i>Arzneimittelforschung</i> , 1998, Aug;48(8):870-80.	
	CK4**	Wiggins et al., "Activity of the yeast MNN1 alpha-1,3-mannosyltransferase requires a motif conserved in many other families of glycosyltransferases," <i>Proc. Nat. Acad. Sci. USA</i> 95(14): 7945-7950 (1998).	
	CL4**	Yamashita et al., "An α -Mannosidase purified from <i>Aspergillus Saitoi</i> is specific for α 1,2 linkages," <i>Biochemical and Biophysical Research Communications</i> 96(3): 1335-1342.	
	CM4**	Yang et al., "Glycosylation and proteolytic processing of 70 kDa C-terminal recombinant polypeptides of <i>Plasmodium falciparum</i> merozoite surface protein 1 expressed in mammalian cells," <i>Glycobiology</i> , 9(12): (1999) 1347-55.	
	CN4**	Yang et al., "Effects of Ammonia on CHO Cell Growth, Erythropoietin Production, and Glycosylation", <i>Biotechnol Bioeng.</i> , 68(4): 370-80 (2000).	
	CO4**	Yip et al., "Cloning and analysis of the <i>Saccharomyces cerevisiae</i> MNN9 and MNN1 genes required for complex glycosylation of secreted proteins," <i>Proc. Natl. Acad. Sci. USA</i> , 91(7): 2723-2727 (1994).	
	CP4**	Yoko-o et al., "Schizosaccharomyces Pombe Och1(+) Encodes Alpha-1,6-Mannosyltransferase that is involved in Outer Chain Elongation of N-Linked Oligosaccharides," <i>FEBS Lett.</i> , 489(1): 75-80 (2001).	
	CQ4**	Yoshida et al., "1-2-alpha-D- mannosidase from <i>Penicillium citrinum</i> : molecular and enzymic properties of two isoenzymes," <i>Biochem. J.</i> 290 (Pt2): 349-354 (1993).	
	CR4**	Yoshida et al., "Expression and characterization of rat UDP-N-acetylglucosamine: α -3-D-mannoside β -1,2-N-acetylglucosaminyltransferase I in <i>Saccharomyces cerevisiae</i> ," <i>Glycobiology</i> , 9 (1): 53-58 (1999).	
	CS4**	Genbank Accession No. AF005034	
	CT4**	Genbank Accession No. AF106080	
	CU4**	Genbank Accession No. AK116684	
	CV4**	Genbank Accession No. D55649	
	CW4**	Genbank Accession No. NM 073594	
	CX4**	Genbank Accession No. NM 121499	
	CY4**	Genbank Accession No. U31520	
✓	CZ4**	Genbank Accession No. X77652	
	CA5**	Genbank Accession No. XM 218816	
Examiner Signature		Michelle K. Galtie	Date Considered
			5/8/06

Substitute for form 1449A/B/PTO				Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/616,082
				Filing Date	July 8, 2003
				First Named Inventor	Stephen Hamilton
				Art Unit	1636
				Examiner Name	Not yet assigned
Sheet	12	of	12	Attorney Docket Number	GFI/107 CIP

MR.T	CB5**	Genbank Accession No. NM 002406	
	CC5**	Genbank Accession No. CAA98114	
	CD5**	Genbank Accession No. NM 088548 (Genbank AN 6678787)	
	CE5**	Genbank Accession No. NM006715	
	CF5**	Genbank Accession No. X77652	
	CG5**	Genbank Accession No. X61172	
	CH5**	Genbank Accession No. NM 000528	

Examiner Signature	<i>Michelle K. Galie</i>	Date Considered	5/8/06
-----------------------	--------------------------	--------------------	--------